

Appendix B: Different Examples of Passive Alcohol Sensors and Their Characteristics*

Common Features for Most Passive Alcohol Sensors

- Portable
- Electrochemical sensors - fuel cell technology, similar to Preliminary Breath Tests, Intoximeter EC/IR
- Specific to alcohol
- Qualitative
- Sample pump or fan draws in specimen for testing
- Read times in seconds, negative tests nearly instantaneous
- Recovery time of seconds to minutes between tests
- Operating temperatures ~ 0 -105 degrees F
- Battery powered
- 1 year warranty

Examples from Different Manufacturers

PAS Systems International Alcohol Sensor Systems
Fredericksburg, VA
800-660-SNIF
www.sniffalcohol.com

Products: P.A.S.[™] III “Sniffer”, P.A.S.[™] Clip Mate, P.A.S.[™] Vr., P.A.S.[™] Sentry

Characteristics:

- Flashlight, Clipboard, Handheld, and Wall mount Units
- Price Range ~ \$400-600 per unit
- Rechargeable battery
- Free calibration during warranty period; recommended at 6 month interval Accuracy or ‘sensitivity’ check recommended monthly
- Color coded bar graph display
- No mouthpieces required

*Also includes some examples of Preliminary Breath Testing (PBT) devices. PBTs can often be modified for passive alcohol sensor sampling such as the Lifeloc FC10 Plus or the Alco-Sensor III with Quick Draw.



P.A.S.™ III “Sniffer” Flashlight



P.A.S.™ Clip Mate



P.A.S.™ Sentry



**P.A.S.™ Vr.
(PBT)**



Alcohol Countermeasure Systems, Inc
Aurora, Colorado
303-366-5699
www.acs-corp.com

Product: ALCOSCAN

Characteristics:

- Wand-like device, resembles flashlight
- Price Range ~ \$400
- Three and fifteen minute deprivation periods for smoking and drinking subjects, respectively
- LED readout indicates zero, low, and high alcohol with green, yellow, and red display.
- Relates to 'quantitative' results of <0.020 , $0.020-0.049$, and >0.050 g/210L respectively
- Rechargeable battery
- No mouthpieces required
- No recommendation on calibration or accuracy checks

Alcohol Countermeasure Systems, Inc.
ALCOSCAN



www.acs-corp.com

CMI, Inc.
Owensboro, KY
866-835-0690
www.alcoholtest.com

Product: AlcoBlow®

Characteristics:

- Displays 'zero', 'low', or 'high' test result on one indicator light
- Wand-like device
- Price Range ~\$250 -\$275
- No regular accuracy checks recommended
- Calibration yearly
- No mouthpieces required
- Alcohol free towelettes recommended to clean cone shaped sampling area



AlcoBlow®



Lifeloc Technologies, Inc
Wheat Ridge, CO
800-722-4872
www.lifeloc.com

Product: FC 10 Plus

Characteristics:

- Modified PBT unit
- Adapts for passive sampling
- Price Range ~ \$580
- Mouthpiece required, can be reused in passive mode
- Provides 'quantitative' estimate
- Calibration services available, wet or dry, recommended yearly
- Accuracy check recommended every 30 days
- Monthly use recommended to assure maintenance of function



FC 10 Plus



Intoximeters, Inc.
St. Louis, MO
800-451-8639
www.intox.com

Product: Quick Draw adapter for Alco-Sensor or Alco-Sensor III

Characteristics:

- Modified PBT Unit - Adaptor for Alco-Sensor PBT makes sampling passive
- Price Range ~ \$500 – \$600 (complete unit)
- Provides ‘quantitative’ estimate - any positive ‘quantitative’ result is evidence of presence of alcohol
- Calibration Service available
- No accuracy check recommendations on Website
- Quick Draw can be removed for direct confirmatory test of positive subject – mouthpiece required
- Recovery time for subsequent tests can take minutes



Quick Draw adapter for Alco-Sensor or Alco-Sensor III



Draeger Safety Inc., Breathalyzer Division
Durango, CO 81303-7911
970-385-5522
www.draeger-breathalyzer.com

Product: Alcotest 7410

Characteristics:

- Looks like a PBT
- 'Pass' / 'Fail' readout
- Price ~ \$425
- No recommendations for operating distances or subject instructions
- Calibration recommended once a year
- Accuracy checks per 'agency guidelines'
- No mouthpieces required in passive mode

Dräger

Alcotest 7410

